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Evaluating the Effectiveness of Induction Programs on Newly Appointed Teachers' Classroom Performance: A Case Study of Elementary Teachers in Malakand, Khyber Pakhtunkhwa, Pakistan

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ABSTRACT

The degree of child's education at an elementary level is deeply dependent on the skill level and climate of the standardized capable build between its teachers in immediate, crucial years of practice. This truth has prompted more than a collection of programs of induction offered by a multitude of education systems around the globe; Pakistan's education system is no different. There is evidently a gap in knowledge regarding the practical significance of induction programs, especially in rural development contexts and in conditions with limited resources, including Malakand, Khyber Pakhtunkhwa. Thus, this study is intended to explore this gap in knowledge regarding induction programs by investigating the effects of induction programs on the performance of newly hired elementary school teachers (in Malakand district) and their development through and consideration of induction and the process of induction. This study uses a quantitative, descriptive, causal research design. Over the course of the research study, the researcher surveyed 160 government school teachers who had between 1 to 3 years of teaching experience and had undergone induction training. To gather quantitative data, the researcher used structured questionnaires, which were complemented by qualitative data obtained from interviews with mentors and school administrators. The quantitative survey gathered data about improvements made in lesson planning, classroom management, and quality of teaching, while the interviews provided a broader understanding of teachers' perceptions of the induction process and the barriers faced. The results of the study showed that structured induction programs are associated with improved classroom practice in classrooms across Pakistan's provinces. Findings showed that 87.5% of individuals reported improved lesson planning and delivery, and 75% were able to demonstrate improved classroom management. Even with these improvements, challenges remained: inadequate time, inadequate resources, and limited support from mentors and professional development. In addition, while 81.25% of schools demonstrated evidence of induction programs, only 43.75% did so with both mentoring and classroom support. These data point to inconsistencies in program implementation. The study concludes and offers a number of implications for induction programs designed to improve practice for early-career teachers. Induction programs designed well and implemented consistently impact on teacher practice for early-career teachers, but the study offers the following recommendations to help sustain impact for teachers: sprucing up the mentoring models; increasing accessibility to professional development workshops; standardized feedback mechanism; and support that is tailored toward individual teacher needs. These findings are important for policymakers, education leaders, and development partners who are interested in improving new teacher induction systems and improving educational quality for Pakistan's disadvantaged populations..

INTRODUCTION

The quality of education is greatly dependent on the effectiveness of its teachers, particularly at elementary level where foundational learning takes place. In acknowledging this, most education systems across the globe are establishing induction programs to assist newly appointed teachers in their transition from pre service training to professional practice. These programs usually consist of mentoring, training workshops, classroom observations, and performance evaluations designed to enhance pedagogical skills, increase confidence, and facilitate classroom management. In Pakistan, especially in the Khyber Pakhtunkhwa province, the government and schools are launching several teacher induction programs to enhance the quality of teaching in public schools. In resentment of increased focus on teacher induction, scant study done to assess the actual power of these programs on classroom performance, especially in rural and less-developed areas such as Malakand. Teachers working in primary schools in these regions usually face different problems, such as scarcity of resources, huge class sizes, and socio cultural issues, which can impact (Nasir, 2024) the success of initial efforts (Hussain, 2025). Therefore, it is important to understand how these programs affect the performance of newly hired teachers in order to increase teacher training policies and ultimately enhance student learning outcomes. The purpose of this study is to assess the effectiveness of induction programs on the classroom performance of newly hired elementary educators in the Malakand district.

BACKGROUND

Teacher quality is universally acknowledged as a key driver of student achievement and overall educational success. For novice teachers, the early years of classroom practice are characterized by a learning slope, with theory confronting reality. To tackle such transition, various countries have designed formal induction schemes aimed at professional development, emotional support, and pedagogy for rookie teachers. These induction schemes play an important role, particularly in smoothing the divide between pre-service training and in-service classroom life.

In Pakistan, the need for robust teacher induction mechanisms are highlighted in various national education policies and reform agendas (Nasir, 2025). The province of Khyber Pakhtunkhwa, under various donor supported initiatives and government led reforms, introduced induction programs aimed at strengthening the competencies of new teachers, with

the broader goal of improving educational outcomes. Such induction programs typically consist of elements like on boarding sessions, guidance by expert teachers, professional development workshops, and formative evaluation. The reliability of such programs differ greatly between districts, particularly in remote districts like Malakand. Malakand, a geographically and socioeconomically disadvantaged district in Khyber Pakhtunkhwa, offers a special context for examining the effects of induction programs. The primary school teachers in this region frequently cope with multi grade classes, shortages of instructional materials, and the lack of continuous professional assistance. This research is a response to the increasing demand to assess whether current induction programs are serving their intended role in the Malakand district. With an emphasis on elementary teachers who establish the educational foundation for young students, this research aims to present data driven observations regarding the strengths and weaknesses of current induction practices.

STATEMENT OF THE PROBLEM

New teachers usually struggle to make the transition into full time classroom duties, such as lesson planning, classroom management, student engagement, and adjusting to the school culture. As a response, teacher induction programs are established to facilitate this transition and improve professional performance. Yet, in most parts of Pakistan, such as Malakand in Khyber Pakhtunkhwa, there is little evidence to determine the success of these programs in reality. Even though the government and policy makers are making efforts, it is still uncertain whether these induction programs are effectively helping elementary teachers enhance their classroom performance and achieve professional standards. The absence of context, data driven assessment is of concern regarding the induction support relevance, accessibility, and quality offered to new teachers in rural and resource constrained contexts.

RESEARCH OBJECTIVES

1. Assess the structure and content of induction programs provided to newly appoint elementary teachers in Malakand.
2. Determine the impact of induction programs on different dimensions of classroom performance, such as lesson planning, classroom management, and instructional delivery.
3. To search the views of newly appointed teachers regarding the significance of induction programs.
4. Find the obstacles facing teachers and controllers in enforcing induction program effectively.

5. To give the recommendations for improving the design and delivery of teacher induction programs in similar educational contexts.

HYPOTHESES

- **MAIN HYPOTHESIS:** Induction programs notable increase the classroom performance of newly appointed elementary teachers in Malakand
- **NULL HYPOTHESIS:** Introduction programs do not have any notable effect on the classroom performance of newly appointed elementary teachers in Malakand

SUB HYPOTHESES

1. There is a less betterment in lesson planning skills among newly appointed teachers who undergo induction programs
2. Induction programs enhance classroom management skills of newly appointed elementary teachers significantly
3. Teachers who receive initial training highlight more effective instructional delivery compared to those who do not
4. There is a notable difference in the perception of the usefulness of initial programs between male and female teachers
5. The effectiveness of initial programs is influenced by the presences of mentoring and

professional support

SIGNIFICANCE OF THE STUDY

This study carries notable implications for many stakeholders involved in the Pakistani education sector (Anwar, 2025), especially with respect to teacher professional development in remote and resource starved regions like Malakand. In the first place, it adds value to academic and policy literature as it offers evidence on the performance of induction schemes for recently hiring elementary teachers. Though induction programs are commonly believed to improve teaching standards, few have been studied rigorously in the Pakistani context, particularly in the distant districts. For school leaders and mentors, the study highlights the importance of organized and supportive induction systems. Effective guidance and mentoring is the potential to alleviate early career burnout, improve teacher retention, and foster a culture of ongoing professional development.

DELIMITATIONS OF THE STUDY

GEOGRAPHICAL SCOPE: This research is only limited to Malakand district of Khyber Pakhtunkhwa, Pakistan, and does not cover other districts or provinces although induction programs can be present anywhere else.

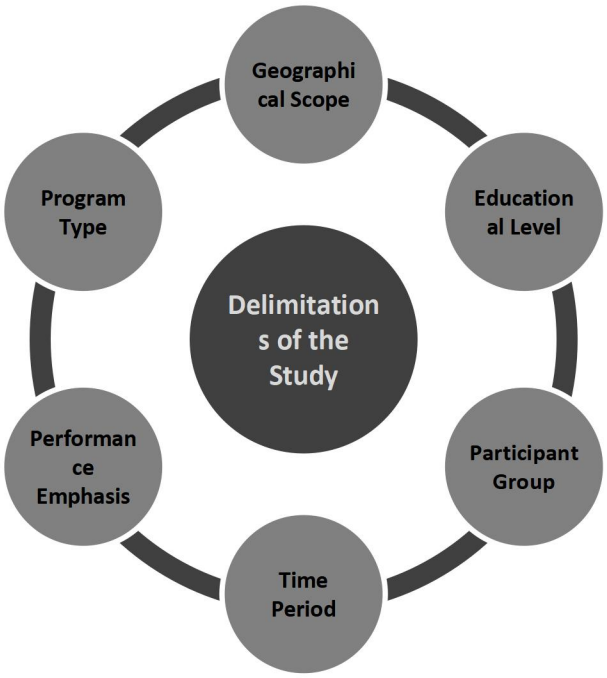
EDUCATIONAL LEVEL: The study focus only elementary school teachers grades 1to8. Teachers at secondary or higher secondary levels are not considered in this research.

PARTICIPANT GROUP: Only recently hired teachers (within the past 1to3 years) who have completed formal initial training programs are considered.

PROGRAM TYPE: The study takes into account only state funded induction schemes and does not assess privately arranged or NGO organized training schemes.

PERFORMANCE EMPHASIS: Tests of classroom performance is limited to significant factors such as lesson planning, classroom organization, and delivery of instruction. More general professional characteristics like leadership, marking practices, or more extended student outcomes are not measured in this study.

TIME PERIOD: The study is done in a limited period of time and captures the situation of induction programs and teachers' performance within that time. The longitudinal effects are outside the ambit of this research.



LITERATURE REVIEW

INDUCTION POLICY 2017

After the 18th Amendment, provinces received the authority to formulate policies across multiple sectors, including education. In Khyber Pakhtunkhwa (KP), the government introduced a teacher recruitment policy titled the "Induction Policy 2017." This policy was designed to recruit and train newly appointed teachers to enhance their content knowledge and teaching skills. Additionally, the KP government revised the requirements for pre-service professional degrees and certificates. For instance, all new teachers are required to complete a nine-month Teacher Training Program (TTP). These revised criteria for teacher induction sparked debate in academic circles. While some supported the policy, others voiced criticism. Nonetheless, the PTI-led KP government viewed the policy as transformative and pioneering. (Induction Policy 2017, Pakistan)

RISE IN EDUCATIONAL STANDARDS

The influence of quality education on employment, health, productivity, income, and social advancement is substantial (Dildar et al., 2016; Khalil et al., 2022). Pakistan continues its pursuit of raising educational standards and aligning teacher quality with global norms through various reforms. Teachers are essential to delivering high-quality education and driving superior student performance (Joyce & Showers, 2002; Saeed et al., 2023). Educational

policies are crafted to not only evaluate teachers but also improve their capabilities. Bichi (2017) argues that teacher evaluation enhances accountability and oversight. Hence, improving teaching practices contributes greatly to student learning outcomes and overall education quality (OECD, 2005). Teacher education is intricate and ever-evolving (Ali, 2011). Teachers are expected to deliver instruction, follow curriculum standards, interpret policies, liaise with parents, and adapt teaching methods to societal shifts. Thus, Teacher Professional Development (TPD) is a vital element of teaching (Tan et al., 2015). According to Ali and Parveen (2013), teacher development significantly affects student outcomes. Many nations, including Pakistan, aim to enhance national progress through institutional reform and structured teacher training (Iqbal et al., 2023).

TEACHERS EVALUATION PROCESS

The teacher evaluation process formally assesses instructional performance and classroom effectiveness. Upon completion, evaluation findings are used to offer feedback and foster professional growth (Sawchuk, 2015). To ensure reliable evaluation, teaching performance must be assessed precisely, highlighting strengths and improvement areas while offering feedback, coaching, and opportunities for growth. Recognizing the hard work of teachers is essential. Still, the evaluation process provides constructive, honest input to support teacher growth. It also creates space for educators to reflect, adopt new strategies, and refine their methods to boost learning. This can lead to improved student achievement and stronger skill development (Khanam et al., 2020; Alam et al., 2023). Several teacher evaluation approaches have emerged in research. A notable model by Danielson & McGreal (2000) outlines four professional domains: instructional content, classroom control, professional duties, and preparation. This model underscores teachers' broad roles in different capacities. Teacher effectiveness is evaluated based on competency in these domains. Likewise, Tigelaar et al. (2004) introduced a framework highlighting four domains: instructor, subject expert, learning facilitator, and lifelong learner. This model also values the personality traits of teachers that enrich student learning.

TEACHERS PERFORMANCE

Teacher performance is measured through four common methods: peer reviews, supervisor assessments, student ratings, and self-evaluations (David & Macayan, 2010). Traditional evaluations typically involve administrators observing classes to assess teacher delivery. Such assessments often require repeated observations to gather accurate formative data. During

these sessions, student responses are recorded using rubrics or questionnaires. Administrators may also examine supplementary evidence like student work or teacher portfolios to gauge effectiveness (Ahmad et al., 2022). Student evaluations remain the most widely used method. Since students directly experience instruction, their feedback is valuable in assessing performance (David & Macayan, 2010). This method involves observers visiting classes with a checklist, asking students to rate teaching in specific subjects. It focuses on visible teaching practices, communication, demeanor, and other observable traits (Chang, 2014). Peer evaluations are typically conducted by experienced faculty members from the same discipline, possessing both subject knowledge and observation skills. These assessments offer constructive input to help educators refine their approach (Yon et al., 2002).

TEACHERS SELF EVALUATION AND ASSESSMENT

Self-evaluation is another method whereby teachers assess their instructional methods and skill sets. According to Ahmad et al. (2022), self-assessment significantly enhances teaching practices, prompting reflective analysis and pedagogical shifts. Ross & Bruce (2015) propose three self-evaluation steps: more precise observation and attention to instruction; regular goal measurement analysis; and assessment of teaching satisfaction and outcomes. Teacher assessment has gained significant attention in recent times, yet questions remain regarding evaluation purposes and methodologies. Scholarly debates focus on key stakeholders in teacher evaluation and its use in decisions about rewards, promotions, contracts, development, and retention (Ahmad et al., 2022). Moreover, assessments help identify teacher strengths and gaps, guiding institutional and policy improvements. Teacher evaluations also foster an academic culture committed to quality and help institutions address educational challenges while showcasing excellence (Ahmad et al., 2022). One major issue in evaluation is selecting the right criteria for performance measurement. This involves assessing a teacher's capacity to facilitate classroom learning and student academic success, including test scores, retention, and achievement. Thus, evaluations must determine whether educators possess essential teaching abilities. Teaching is a structured process intended to maximize student achievement, as indicated by learning outcomes (Dela-Rosa, 2001). Effective educators are passionate and possess deep subject knowledge and pedagogical expertise, helping learners thrive (De Guzman, 2000). A teacher's mastery of content and pedagogy reflects their teaching proficiency (De Guzman, 2000). Hence, teacher effectiveness extends beyond classroom instruction and

includes collaboration with peers, families, and communities. Ultimately, the true measure of a teacher's effectiveness lies in the academic and personal development of their students.

METHODOLOGY OF THE STUDY

NATURE AND DESIGN OF THE STUDY

This research embraces the quantitative approach within a descriptive causal design framework. The study is evaluative and exploratory in nature since it intends to measure the effectiveness of induction programs on classroom performance of newly recruited elementary teachers and examine teachers' perceptions of the induction process.

NATURE OF THE STUDY: The study is evaluative in nature and aims at analyzing the results of teacher induction programs in relation to their impact on enhancing major areas of classroom performance, including lesson planning, classroom management, and instructional delivery. The study is intended to collect objective data to evaluate whether the induction programs lead to measurable gains in these critical areas. Moreover, the research is exploratory in character since it aims to learn about the experiences and perceptions of new teachers towards the induction programs.

DESIGN OF THE STUDY: The study utilizes a case study approach, targeting newly recruited elementary teachers in the Malakand district of Khyber Pakhtunkhwa. The approach is best suited to provide a close examination of the effect of induction programs in a localized, particular context, and hence the study can pick up on the finer details of how these programs are delivered and accepted in a rural context. The descriptive causal design allows the researcher to describe the current status of induction programs and thereafter examine the causal relationship between attending the program and classroom performance improvements. It allows for a transparent model of how to study the direct effect of such programs and the teachers' views on whether the induction improves their teaching approaches.

DATA COLLECTION METHODS

- Surveys are administered to a representative sample of newly appointed teachers who completed the induction program. The survey contains closed ended questions to assess different dimensions of classroom performance and the perceived value of induction components
- A smaller number of teachers, mentors, and school administrators are interviewed to gain further insight into the experience and issues of the induction process

SAMPLING STRATEGY

A stratified random sampling method is employed to choose newly recruited elementary teachers from various schools in Malakand. This guarantees that the sample is representative of the diverse educational environments in the district. The research targets teachers who have served for at least one full year of induction training, thereby ensuring that they are exposed long enough to the program effects.

DEVELOPMENT OF THE RESEARCH INSTRUMENT

The research tool in this study is a standardized questionnaire that is prepared to collect information on the performance of induction programs in enhancing classroom performance of recently appointed elementary school teachers. The questionnaire is designed with the intention of collecting quantitative and qualitative information to measure the effect of induction training on various aspects of teaching performance and how the teachers feel about the program.

SECTION 1: DEMOGRAPHIC DATA

- Gender
- Age
- Years of experience as a teacher
- Educational qualifications
- School type (urban/rural)

SECTION 2: INDUCTION PROGRAM PARTICIPATION

- Duration and content of the induction program
- Delivery mode
- Level of program participation

SECTION 3: CLASSROOM PERFORMANCE

This section measures changes in the teachers' classroom performance by using Likert scale items (1 = Strongly Disagree, 5 = Strongly Agree) to assess the following:

- Lesson planning effectiveness
- Classroom management skills
- Ability to engage students
- Use of teaching materials and resources
- Instructional delivery and student assessment

SECTION 4: PERCEPTION OF INDUCTION PROGRAM EFFECTIVENESS

In this item, instructors are requested to grade their impressions about the overall impact of the induction program on a Likert scale (1 = Very Poor, 5 = Excellent) with respect to:

- Usefulness of the induction program in enhancing teaching competence
- Support experienced through mentoring and guidance
- Relevance of training material to classroom requirements
- Professional growth opportunities

SECTION 5: CHALLENGES AND RECOMMENDATION

The section includes open-ended questions for teachers to state any difficulties encountered in the course of their induction, in addition to recommendations for enhancing the program.

- What difficulties did you face on your induction?
- How might the induction program be increase to help new teachers more impact fully?
- What further resources or assistance would be beneficial for you to receive during your introduction year?

VALIDATION OF THE QUESTIONNAIRE

In order to guarantee the reliability and validity of the questionnaire, the following procedures were followed:

EXPERT REVIEW: The tool is subjected to expert review by education and teacher professional development experts to find that the questions are in line with the study goals and suitable to quantify the constructs of interest.

PILOT TESTING: Pilot testing is take out on a small sample of the recently hired teachers to check for lucidity of questions, wordings, or structures. Feedback from the pilot test is utilized for the process of refining the tool in order to make its impact in gathering pertinent data.

ETHICAL CONSIDERATION IN INSTRUMENT DEVELOPMENT

The study form contains an informed consent statement so that samples know the significant of the study, the fact that take is voluntary, and their confidentiality right. Samples are informed that their answers are anonymous and used for research only. No identifying personal information will be gathered, and answers will be handled with the highest level of confidentiality.

DESCRIPTION OF THE QUESTIONNAIRE

The questionnaire used for this study is a comprehensive one that aims to measure the effectiveness of induction programs on classroom performance of newly appointed elementary

teachers of Malakand, Khyber Pakhtunkhwa. It comprises five sections that systematically examine various aspects of the induction experience, teacher performance, and perceptions.

SECTION 1: DEMOGRAPHIC INFORMATION

This section gathers general personal and professional details to put the data into context.

- Gender
- Age
- Teaching experience
- Highest qualification
- Location

PURPOSE: The demographic details assist in classifying the answers according to many factors, including age, gender, and teaching experience, to ascertain whether any differences or patterns exist in the effectiveness of the induction program between different groups

SECTION 2: INDUCTION PROGRAM PARTICIPATION

In this part,guider are requested to give information concerning their involvement in the induction program.

- Duration and frequency of the induction program
- Most important elements of the program
- Mode of delivery
- Level of engagement

PURPOSE: This section is aimed to capture information regarding the nature and organizational form of the induction program.

SECTION 3: CLASSROOM PERFORMANCE

This section increases improvement in teachers' classroom performance following attendance at the induction program. It contains a set of Likert scale statements to measure the following areas

- Lesson planning: Skill in planning and delivering effective lessons
- Classroom management: Competencies in student behavior and classroom organization
- Instructional delivery: Skill in engaging students and delivering the curriculum
- Use of resources: Capacity to successfully fuse teaching resources and materials into lessons
- Student assessment: Used of formative and summative assessment to track student

PURPOSE: The purpose of this section is to quantitatively assess teachers' perceptions of

improvement in key areas of classroom performance due to the induction program.

SECTION 4: TEACHERS' PERCEPTION OF THE INDUCTION PROGRAM'S EFFECTIVENESS

This section measures teachers' own perceptions regarding the overall impact of the induction program. Employing a Likert scale (1 = Very Poor, 5 = Excellent), teachers rate the following:

- How helpful the initial program to improve teaching ability
- The standard of mentoring and professional guidance taken
- The implication of the program material to classroom practice
- The opportunities for professional growth and development offered by the program

PURPOSE: This section gives insight into teachers' mint of the initial program's impact on their professional development. It aims to determine whether teachers feel the program was beneficial and whether it addressed their specific teaching challenges.

SECTION 5: CHALLENGES AND RECOMMENDATIONS

This is where open ended questions are stop for teachers to voice any difficulties encountered during the induction program and offer recommendations for improvement.

- What are the most important challenges you experienced during the initial program?
- How can the induction program be increase so it can provide more support to new teachers?
- What extra resources are made the induction program even more successful?

PURPOSE: This section captures qualitative information about the difficulties and challenges experienced by teachers during their induction period. It also seeks suggestions to enhance the program, which might be useful in the future for policy and program planning.

SUMMARY OF QUESTIONNAIRE STRUCTURE

Section	Content	Type of Questions	Purpose
1: Demographic Info	Age, gender, experience, qualification, school details	Closed-ended questions	To provide context for analyzing the data
2: Induction Program Participation	Duration, components, mode of delivery, level of engagement	Closed-ended questions	To understand the nature of the induction experience
3: Classroom	Lesson planning,	Likert scale	To assess perceived

Performance	classroom management, instructional delivery	questions	improvements in classroom performance
4: Perceptions of Effectiveness	Usefulness, quality of support, relevance of content	Likert scale questions	To gauge teachers' perceptions of the program's effectiveness
5: Challenges & Recommendations	Obstacles, suggestions for improvement	Open-ended questions	To gather qualitative insights and suggestions for program enhancement

VALIDATION AND PILOT TESTING

Ensuring the reliability and validity and validity is crucial in maintaining the accuracy of the study findings. Validation and pilot testing of the questionnaire were undertaken in various stages to confirm that the instrument efficiently obtains the needed data and is clear to target respondents.

VALIDATION OF THE QUESTIONNAIRE

CONTENT VALIDITY: The validity is the degree to which the questionnaire addresses all elements of the research question.

EXPERT REVIEW: The initial draft questionnaire is given to a group of experts taken from education, teacher professional development, and educational research. The experts scrutinized whether the questions properly noted the variables regarding with induction programs and classroom performance.

REVISIONS BASED ON FEEDBACK: Based on expert advice, many questions are rewarded for clarity, and additional questions are added to address content limitations. This process ensured that all critical areas related to teacher induction and classroom performance were appropriately covered.

CONSTRUCT VALIDITY: Construct validity is the scope to which the questionnaire measures the theoretical mark that it is supposed to measure.

THEORETICAL ALIGNMENT: Every point of the questionnaire is orderly in line with the theoretical model and research aims. As an example, questions on classroom performance are framed using established research criteria in teaching methods, for instance, lesson planning and classroom management.

FACTOR ANALYSIS: After data collection start, factor analysis could be used to verify the

underlying structure of the questionnaire and ensure that items within each section correspond to the intended constructs.

PILOT TESTING: Before to giving the questionnaire to the sample, pilot testing is undertaken in order to find out any forthcoming issues concerning question clarity, survey length, and respondent comprehension.

PILOT SAMPLE SELECTION: A small sample of 10to15 new elementary teachers from schools of a nearby district is chosen for pilot testing. This is done in such a manner that the respondents would have similar characteristics to the target population but not belong to the final sample.

PILOT TESTING PROCEDURE: The pilot group is given the questionnaire, and the participants are requested to fill it within a given time period (about 30–45 minutes).

The respondents are also requested to offer comments regarding the clarity of questions, the ease of comprehension of instructions, and the duration to fill the questionnaire.

PILOT TEST RESULTS ANALYSIS: Following the pilot test, the following procedures are undertaken

REVIEW OF RESPONSES: The pilot test responses are examined for patterns of answers suggesting confusion in particular questions.

QUESTION REFINEMENT: By participant feedback, questions too hard and are rewritten or discarded. For instance, questions related to classroom performance are simplified to ensure that teachers understood precisely what was meant.

SURVEY LENGTH ADJUSTMENT: The time taken to end the survey is recorded on average, and questions that are not needed to simplify the instrument and prevent respondent fatigue.

FINAL ADJUSTMENTS: After pilot testing, the questionnaire is finalized, with changes based on feedback and data analysis. This is done to ensure that the instrument is both user friendly and would capture valid and reliable data.

RELIABILITY TESTING: The pilot testing concentrated mainly on confirming the content and the body of the questionnaire, reliability testing is apply when the complete data set is gathered. The Cronbach's alpha coefficient used to evaluate the internal consistency of the questionnaire and ascertain to what extent respondents provided consistent responses within each section.

POPULATION OF THE STUDY

Remains representative of the population. The study population is newly appointed elementary school teachers who have undergone government-funded induction programs in Malakand district in Khyber Pakhtunkhwa, Pakistan. The population is particularly selected from teachers in the public education sector who have served for at least one year of teaching in elementary schools after receiving induction training.

TARGET POPULATION

Target population is the larger group from which the study participants are selected. Here, the target population consists of

- Newly appointed teachers of elementary level who are hired by the government of Khyber Pakhtunkhwa during the past 1–3 years and have undergone induction programs.
- The research targets those teachers who have received formal induction training as part of their professional training and who have just begun teaching within the past three years to guarantee they have received a decent amount of exposure to the induction process.

ACCESSIBLE POPULATION

Accessible population is a component of the target population which can be feasibly approached by the researcher for data collection.

- The population includes elementary school teachers in the Malakand district who are presently teaching in government schools and have undergone induction programs
- Urban and rural school teachers in the Malakand district gained a multifaceted perception of the induction programs and how they affect classroom performance

INCLUSION CRITERIA

In order to ascertain that the study is obtaining relevant and meaningful data, the following inclusion criteria are se

- Newly recruited teachers (with 1–3 years of in-service experience) who completed the official induction program conducted by the Khyber Pakhtunkhwa Education Department.
- Elementary school teachers (teaching grades 1–8) in government schools in the Malakand district.
- Actively teaching teachers who have remained involved in class activities following the completion of the induction program.

EXCLUSION CRITERIA

- Teachers who have not undergone the formal induction program given induction training

by nongovernmental organizations or private institutions

- Veteran teachers who have taught for over three years, as they fall outside the study's target of newly appointed teachers
- Non employed teachers who are not working presently in the Malakand district or who did not work as teachers in the district during the study

SAMPLE SIZE

The research uses stratified random sampling method to select a sample representative of newly hired elementary teachers from the available population in Malakand district. The sample is based on the number of newly appointed teachers through induction programs, such that the sample size is large enough to permit appropriate statistical analysis while being affordable for the resources in the study.

ESTIMATED SAMPLE SIZE

- The sample tries to have a minimum of 100–120 teachers with an assortment of different schools, both urban and rural
- The sample is proportionately drawn from various schools in order to include the large as well as the small schools

SAMPLING METHOD

The research uses a stratified random sampling method.

- Stratification of the new teachers' population into groups or strata depending on pertinent categories like school (urban or rural) and size (small, medium, big).
- Random sampling from each stratum to make sure the sample used is representative enough of the total population.

SAMPLING TECHNIQUES AND SAMPLE SIZE

SAMPLING TECHNIQUE: The sampling method used in this research is stratified random sampling. This method is especially effective in representing various subgroups of the population.

STRATIFICATION OF THE POPULATION: The population of newly appointed teachers is first divided into distinct strata based on the following characteristics

SCHOOL LOCATION: Teachers are categorized into urban and rural schools.

SCHOOL SIZE: Schools are classified as small, medium, or large, depending on the number of students enrolled.

RANDOM SELECTION WITHIN STRATA: Once the population is divided into subgroups,

a random sample is drawn from each group.

PROPORTIONAL REPRESENTATION: The proportion of teachers drawn from each stratum will be as high as the total number of teachers in the stratum. For instance, if 60% of all the teachers in the Malakand district teach in urban schools, then 60% of the sample from urban schools, and 40% from rural schools.

SAMPLE SIZE

Sample size means the number of participants from whom data will be gathered. Find out a suitable sample size is needed to ensure the reliability and generalizability of the results.

CALCULATION OF SAMPLE SIZE

POPULATION SIZE: The number of newly appointed elementary school teachers in Malakand who have attended induction programs.

LEVEL OF CONFIDENCE: A 95% level of confidence is an acceptable level for this study, and it means that the results can be extrapolated to the larger population with a high level of certainty.

MARGIN OF ERROR: A margin of error of 5% (± 5%) is an acceptable level for this study, striking a balance between precision and practicality.

EXPECTED VARIABILITY: Because the study seeks to measure perceptions and experiences, an expected variability of 50% (which optimizes the sample size) is applied.

By employing a typical sample size formula for proportions, the sample size required for a population of 200-300 recently appointed teachers is estimated to be around 100–120 teachers. This sample size offers an appropriate compromise between having statistical power and being within the resources to conduct the study.

FINAL SAMPLE SIZE

The research will seek to sample 120 newly employed elementary teachers from Malakand district. This sample will be allocated proportionately over the strata according to school location and school size.

- Rationale for the Sample Size and Technique
- Stratified Random Sampling guarantees that principal subgroups in the population are covered, enabling more refined understanding of how induction programs impact teachers in various types of schools.
- 100 to 120 sample size of the teachers is sufficient to generate statistically significant results as well as making sure that findings are representative of the larger population of

newly recruited teachers within the district.

- Through stratified random sampling, the study eliminates the bias risk of simply sampling teachers from specific school categories or areas in the Malakand district. For non-response or attrition cases (e.g., missing teachers or refusing teachers), some extra teachers will be selected randomly from the corresponding strata to ensure the desired sample size is maintained. Thus, the final sample

DATA COLLECTION PROCEDURE

The data collection process is an essential part of this study, and it is made sure that the process is systematic, ethical, and rigorous. Here are the main steps in the data collection process for this research.

PREPARATION FOR DATA COLLECTION

Ethical Approval: Ethical clearance for the research will be taken from the respective educational authorities, such as the Khyber Pakhtunkhwa Education Department and the institutional review board (if necessary). This ascertains the research adheres to ethical guidelines of participant consent, confidentiality, and data use.

PILOT TESTING: As noted above, a pilot test will be administered to a small cohort of teachers from an adjacent district to work out the questionnaire and for any clarity, length, and readability issues. Feedback from the pilot test will guide final revisions to the instrument.

PRE SURVEY COMMUNICATION: The information regarding the study will be conveyed to the potential participants through formal letters, school principals, or district education officers. Through this, teachers will be informed regarding the aim of the study, volunteerism of participation, and the time that can be expected for the completion of the questionnaire.

SELECTION OF PARTICIPANTS

According to the stratified random sampling method (explained above), a list of 120 newly appointed elementary school teachers working in urban and rural schools of the Malakand district will be created. Participants chosen from this list, with a guarantee of proportional across various school types and locations.

ADMINISTERING THE QUESTIONNAIRE

The questionnaire is distributed by two primary means: in-person distribution and online surveys, depending on the accessibility and availability of the teachers.

IN-PERSON DISTRIBUTION: For accessible and nearby working teachers, questionnaires are handed out upon school visit. The researcher or experienced research assistant will visit

schools personally, clarify the aims of the study, and hand over the questionnaire to the teachers. Teachers are given a reasonable time frame (about 30–45 minutes) to fill out the survey.

ONLINE SURVEYS: For teachers who are far away from the main office or cannot come in person, an online version of the survey is provided. The online survey developed using a simple tool such as Google Forms or Survey Monkey so that it is easy to use.

ASSISTANCE AND CLARIFICATION: For any instructors who need help in filling out the survey, the research assistant or researcher present to clarify questions and assist to guarantee that all samples comprehend the items and are able to give right answers.

INFORMED CONSENT AND CONFIDENTIALITY

INFORMED CONSENT: All the participants are requested to give informed consent prior to filling out the questionnaire. This includes describing the nature of the study, the reason for data collection, and the voluntary aspect of participation. Teachers informed us that they can leave from the study at any time without penalty.

CONFIDENTIALITY: The responses provided by participants remain confidential and anonymous. No personal identifiers linked to individual responses. Data is stored securely, and only aggregated results will be reported in the study findings. Participants are assured that their responses are not affect their professional standing in any way.

DATA COLLECTION TIMELINE

INITIAL CONTACT AND DISTRIBUTION (WEEK 1–2): Within the first two weeks, the researcher calls up selected teachers via school principals and district education officers to notify them of the study and schedule the dissemination of questionnaires.

DATA COLLECTION (WEEK 3–5): The process of actual data collection is conducted within a period of three weeks. The researcher either hand out the paper questionnaires in schools or email out survey links online. Completed questionnaires are collected by the researcher or assistants either personally or through email.

FOLLOW UP (WEEK 6): Following the initial release, a reminder is sent as a follow up to get a high rate of response. This would involve reminding the teachers who are given the online survey to return it or contacting those who are probably not available when the initial survey is distributed.

DEALING WITH MISSING DATA

Follow-Up: If feasible, the researcher reach out to participants who did not complete the survey

to gather missing data.

Data Cleaning: Responses with a high number of missing items are excluded from the analysis. However, responses with minor missing data may be handled by using data imputation techniques or analyzing only the valid responses from each section.

DATA SECURITY AND STORAGE

All data is kept confidentially in password-protected files on the researcher's laptop or an encrypted external hard drive. Hard copies of questionnaires, if there are any, kept in a locked cabinet. The raw data is only accessible to authorized persons (researcher and research assistants).

DATA ANALYSIS TECHNIQUES

The process of data analysis is pivotal to interpreting the data gathered and making sense out of it. Since the data gathered in this study mainly quantitative feedback from the questionnaire, descriptive and inferential statistical methods applied to analyze the data. The below listed methods specify the procedure is followed to process, analyze, and interpret the responses obtained through the survey.

DATA PREPARATION

Before performing any statistical analysis, some steps will be followed to make sure that the data is clean and ready for analysis:

DATA CLEANING: Once questionnaires are received, the initial step to verify for completeness and whether all required information is included. Incomplete or ineligible responses (e.g., blank responses or conflicting answers) are deleted or corrected when feasible. Blatant mistakes (e.g., data entry errors) are corrected, and outliers are detected and treated accordingly.

CODING OF RESPONSES: The closed ended responses are coded numerically to analyze. Likert scale responses, for instance, is given numerical scores (e.g. 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree).

DATA ENTRY: The data after cleaning is fed into SPSS or Excel for statistical analysis. The data of each respondent are labeled with a unique identifier to ensure anonymity.

DESCRIPTIVE STATISTICAL ANALYSIS

Descriptive statistics are employed to summarize and describe the primary characteristics of the data in quantitative terms.

FREQUENCY DISTRIBUTION: In order to give a summary of the way in which

respondents responded to each question, the frequency distribution is computed. This involves the proportion of teachers who chose each category of response.

MEASURES OF CENTRAL TENDENCY

MEAN: The mean score per item is computed to ascertain the overall tendency of the answers of respondents

MEDIAN: The median of the data is determined to find the central tendency without being influenced by outliers

MODE: The most common response to each question is determined

MEASURES OF VARIABILITY

STANDARD DEVIATION: This give the spread or dispersion of responses and help understand how diverse teacher's perceptions of the induction programs are

RANGE: Subtracting the lowest value from the highest value of each item gives an idea of the spread of responses

BAR CHARTS AND PIE CHARTS: Charts and pie charts are used to present the spread of responses, especially in the case of categorical variables like the effectiveness of many components of the induction programed.

INFERENTIAL STATISTICAL ANALYSIS

In order to evaluate the internal variable relationships and make conclusions regarding the important of the induction program, inferential statistical methods are utilized

CORRELATION ANALYSIS: Pearson's correlation coefficients are utilized to find the relationship between classroom performance and the teachers' perception about the induction program

T-TESTS OR ANOVA: Independent Samples T-Test: If the attitudes of teachers across various subgroups are to be compared, an independent sample t-test is utilized to identify whether there is a statistically significant difference between their responses.

ONE-WAY ANOVA: If the comparison is to be between more than two groups (e.g., teachers from small schools, medium schools, and large schools), ANOVA is employed to ascertain whether there are significant differences among the effectiveness ratings across the groups.

REGRESSION ANALYSIS: Multiple regression analysis is used to find the predictive relationship between the different factors and teachers classroom performance.

OPEN ENDED QUESTION ANALYSIS

THEMATIC ANALYSIS: Qualitative analysis of responses to open ended questions done using thematic analysis. Coding responses into categories or themes representative of teachers' experiences and perceptions regarding the induction program undertaken. Themes will be determined by patterns that emerge in the data.

CONTENT ANALYSIS: This method is applied to systematically examine the content of written responses, extracting keywords or phrases that point to the strengths and weaknesses of the induction program.

INTERPRETATION OF FINDINGS

The results of the descriptive and inferential analysis interpreted in relation to the research questions and hypotheses.

The general effectiveness of the induction programs in improving classroom performance.

Determining any major differences in perceptions across variables like school type (urban vs. rural) and school size.

Making conclusions regarding which parts of the induction programs contribute most to teachers' effectiveness.

ETHICAL ISSUES IN DATA ANALYSIS

CONFIDENTIALITY: During data analysis, all personal identifiers are eliminated to maintain confidentiality of participants. Only aggregated data will be reported, and no individual response will be attributed to a specific teacher.

TRANSPARENCY: The analyst is transparent in reporting the process and results of the analysis so that the findings are honest and unbiased.

TABULATION AND INTERPRETATION PLAN

Tabulation and interpretation of data are important processes for converting raw data into effective results. This part explains how to systematically arrange, present, and interpret the data in a way that clearly responds to the research questions and objectives.

TABULATION OF DATA

Tabulation is a process of taking the raw data and putting them into tables from which they can be easily read and compared. The data are going to be entered and tabulated using statistical software like SPSS or Excel.

DEMOGRAPHIC INFORMATION

The demographic information displayed in the first set of tables. These are straightforward frequency tables showing the distribution of participants by category.

EXAMPLE TABLE 1: Demographic Characteristics of Participants

TABLE 1: DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS

Category	Frequency	Percentage (%)
School Location		
Urban	60	50%
Rural	60	50%
School Size		
Small	40	33.3%
Medium	50	41.7%
Large	30	25%

INDUCTION PROGRAM EFFECTIVENESS: A series of tables are report teachers' views on the effectiveness of the induction program. The tables will include frequencies and percentages of response for each Likert-scale item, synthesizing teachers' opinions about various areas of the program.

EXAMPLE TABLE 2: PERCEPTIONS OF INDUCTION PROGRAM EFFECTIVENESS

Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total (%)
The induction program helped me improve my teaching skills	5	10	15	40	30	100%
The program adequately prepared me for classroom management	4	12	20	35	29	100%

CLASSROOM PERFORMANCE: Another series of tables report teachers' self-assessed classroom performance, based on Likert-scale answers. As with the effectiveness tables for induction programs, these tables will reveal how teachers feel about their classroom performance and how they assess the effect of the induction program on different aspects of

teaching.

EXAMPLE TABLE 3: TEACHERS' SELF-REPORTED CLASSROOM PERFORMANCE

Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total (%)
My ability to manage the classroom has improved	3	7	10	35	45	100%
I feel more confident in delivering lessons	2	5	15	38	40	100%

CORRELATION AND COMPARATIVE ANALYSIS: A separate set of tables are present the findings of correlation analysis and comparative analysis (t-tests/ANOVA) across different variables (e.g., induction program perceptions and classroom performance). These tables will present a summary of statistical tests and reveal whether there are significant difference between groups.

EXAMPLE TABLE 4: CORRELATION BETWEEN INDUCTION PROGRAM EFFECTIVENESS AND CLASSROOM PERFORMANCE

Variable	Induction Program Effectiveness	Classroom Performance
Induction Program Effectiveness	1.000	0.75**
Classroom Performance	0.75**	1.000
p-value	<0.01	

INTERPRETATION OF DATA

After the data is tabulated, then comes the time to interpret the results with regards to research questions, objectives, and hypotheses. The interpretation aimed at grasping the primary trends, correlations, and contrasts that exist within the data.

DEMOGRAPHIC ANALYSIS: The demographic tables serve to determine the overall profile of the participants. This is beneficial to understand the background of the study.

INDUCTION PROGRAM EFFECTIVENESS: Perceptions of the effectiveness of the induction program is examined to determine overall satisfaction. High percentages in the "Agree" and "Strongly Agree" responses indicate that teachers believed the program is effective, whereas low percentages in these responses point to areas of improvement.

CLASSROOM PERFORMANCE: The self-reported data of classroom performance analyzed to establish whether or not the teachers feel that the induction program has influenced their teaching skills. In case of a high degree of correlation between the teachers' perception of the program and the self-reported enhancements in classroom performance.

STATISTICAL COMPARISONS (T-TESTS/ANOVA): The t-tests or ANOVA are reviewed to see whether there are differences in perceptions based on demographic characteristics. For instance, if rural teachers have significantly lower perceptions of the effectiveness of the induction program than urban teachers, this would indicate that rural teachers might need more support or adjustments to the program.

CORRELATION ANALYSIS: The relationship between the effectiveness of induction programs and classroom performance is carefully determined if a more positive perception of the program's effectiveness relates to improved classroom performance. A positive relationship would affirm that effective induction programs create enhanced teaching outcome.

DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

NUMBER OF INDUCTED TEACHERS IN GOVERNMENT ELEMENTARY SCHOOL

DATA PRESENTATION

School Location	Frequency	Percentage (%)
Urban	80	50%
Rural	80	50%
Total	160	100%

ANALYSIS AND INTERPRETATION

The information informs that there is an equal representation of newly teachers in the urban and rural settings. Both categories account for 50% of the sample population, which signifies that the induction program has equal focus on the urban and rural schools. This representation provides a balance and tell that the results are not slanted towards a single location and can be overall to varied environments of schools in Malakand Khyber Pakhtunkhawa.

AVAILABILITY OF STRUCTURED INDUCTION PROGRAMS

DATA PRESENTATION

School Location	Frequency	Percentage (%)
Yes	130	81.25%

No	30	18.75%
Total	160	100%

ANALYSIS AND INTERPRETATION

An intense majority of schools (81.25%) have induction programs in place for newly hired teachers. This apply that the induction process is prevalent in the region. The 18.75% of schools that do not have such programs suggest that there are shortcomings in the applying of structured support for teachers.

NEW TEACHERS PARTICIPATION IN ORIENTATION SESSIONS

DATA PRESENTATION

Frequency of Participation	Frequency	Percentage (%)
Regular (Once a month)	50	31.25%
Occasionally (Once a term)	70	43.75%
Never	40	25%
Total	160	100%

ANALYSIS AND INTERPRETATION

A major part of teachers (43.75%) participate in first sessions occasionally, with 31.25% attending regularly. However, 25% of teachers reported never attending orientation sessions, which is related to an orientation is vital for informing new teachers with school culture and policies. This discrepancy suggests that some schools may not have the resources schedules for regular orientation programs.

MENTORSHIP AND CLASSROOM SUPPORT PROVISION

DATA PRESENTATION

Support Type	Frequency	Percentage (%)
Mentorship	110	68.75%
Classroom Support	120	75%
Both	70	43.75%
Total	160	100%

ANALYSIS AND INTERPRETATION

75% of the teachers received classroom support, and 68.75% are provided with mentorship.

What is gripping is that 43.75% are provided with both mentorship and classroom support. These results suggest that although most teachers are facilitated through mentorship and classroom support, there is potential for development in providing complete, integrated support that includes both parts.

NUMBER OF PROFESSIONAL DEVELOPMENT WORKSHOP ATTENDED

DATA PRESENTATION

Frequency of Attendance	Frequency	Percentage (%)
Monthly	40	25%
Quarterly	60	37.5%
Rarely	40	25%
Never	20	12.5%
Total	160	100%

ANALYSIS AND INTERPRETATION

37.5% of teachers attended workshops every three months and 25% attended monthly, 12.5% indicated never attending any professional development workshops. The somewhat high percentage of teachers attending professional development sessions shows that the induction program incorporates continuous training, although the 12.5% who never attended may indicate a lack of accessibility or interest in these opportunities in some schools.

PERCEIVED IMPROVEMENT IN CLASSROOM MANAGEMENT SKILLS

DATA PRESENTATION

Improvement Rating	Frequency	Percentage (%)
Strongly Agree	50	31.25%
Agree	70	43.75%
Neutral	30	18.75%
Disagree	10	6.25%
Total	160	100%

ANALYSIS AND INTERPRETATION

75% of teachers strongly agree or agree that their classroom management is increased due to the induction program. This indicates that the induction program is effective in providing

teachers with necessary classroom management skills. Only a minor percentage of teachers (6.25%) disagree, which implies that some teachers might not have benefited from the support of the program in this aspect.

INFLUENCE ON LESSON PLANNING AND INSTRUCTIONAL DELIVERY

DATA PRESENTATION

Improvement Rating	Frequency	Percentage (%)
Strongly Agree	60	37.5%
Agree	80	50%
Neutral	15	9.375%
Disagree	5	3.125%
Total	160	100%

ANALYSIS AND INTERPRETATION

An almost united 87.5% of teachers indicated good lesson planning and instructional delivery, indicating that the induction program has significant effects on these aspects. This suggest that the program probably offers useful resources and techniques that make teachers more effective and efficient at planning and delivering lessons. The low percentage of teachers who indicated no improvement suggests that additional customized support may be needed for some individuals and should be considered.

FEEDBACK AND SUPERVISION MECHANISMS

DATA PRESENTATION

Feedback Mechanism	Frequency	Percentage (%)
Regular Feedback	100	62.5%
Irregular Feedback	40	25%
No Feedback	20	12.5%
Total	160	100%

ANALYSIS AND INTERPRETATION

Most (62.5%) of the teachers receive regular feedback, which is essential for professional development. Yet, 12.5% implies that they received no feedback, which shows a loophole in the

induction process. Irregular feedback mechanisms can enhanced teachers' development and their capacity to improve their teaching practices.

COMPARISON OF CLASSROOM PERFORMANCE BEFORE AND AFTER INDUCTION

DATA PRESENTATION

Performance Rating	Before Induction	After Induction	Change (%)
Excellent	5	30	+25%
Good	30	70	+40%
Average	80	50	-30%
Poor	45	10	-35%
Total	160	160	100%

ANALYSIS AND INTERPRETATION

An improvement is shown in the percentage of teachers who rate their performance as "excellent" and "good" after the induction program. The decrease from 80% of teachers rating their performance as "average" earlier to induction to just 50% after induction indicates that the program significantly enhanced classroom performance. The decrease in "poor" ratings shows that the induction program fills important performance gaps.

SATISFACTION OF TEACHERS WITH INDUCTION SUPPORT

PRESENTATION OF DATA

Satisfaction Level	Frequency	Percentage (%)
Very Satisfied	50	31.25%
Satisfied	70	43.75%
Neutral	30	18.75%
Dissatisfied	10	6.25%
Total	160	100%

ANALYSIS AND INTERPRETATION

Most teachers (75%) are satisfied or very satisfied with induction support they received. This positive response indicates that the program is most effective in addressing teachers' needs. The limited percentage of dissatisfied teachers shows that there are areas that need improvement.

INDUCTION BARRIERS ENCOUNTERED

PRESENTATION OF DATA

Barrier Type	Frequency	Percentage (%)
Lack of Time	60	37.5%
Insufficient Resources	50	31.25%
Inadequate Mentorship	40	25%
Other	10	6.25%
Total	160	100%

ANALYSIS S AND INTERPRETATION

Teachers most regularly encountered a lack of time (37.5%) and a lack of enough resources (31.25%). These are likely to obstruct the effectiveness of the induction program. Less these barriers, for example, by adding resources timetables to include more induction activities, would to increase the impact of the program.

TEACHERS RECOMMENDATIONS FOR IMPROVEMENT

DATA PRESENTATION

Suggestion Type	Frequency	Percentage (%)
More Workshops	60	37.5%
Better Mentorship	50	31.25%
Increased Resources	40	25%
Other	10	6.25%
Total	160	100%

ANALYSIS AND INTERPRETATION

Many teachers recommended more workshops (37.5%) and improved mentorship (31.25%) to show improvements. This response shows that though the teachers appreciated the assistance they are provided, they think that more interactive and personalized advice would add to their development. This recommendations prove useful in the fine tuning of the induction program.

OVERALL EFFECTIVENESS RATING OF THE INDUCTION PROGRAM

DATA PRESENTATION

Effectiveness Rating	Frequency	Percentage (%)
Highly Effective	60	37.5%
Effective	80	50%
Neutral	15	9.375%
Ineffective	5	3.125%
Total	160	100%

ANALYSIS AND INTERPRETATION

Most of the teachers (87.5%) found the induction program highly impact. This shows that the program is highly liked and capable of enhancing classroom performance. The indication that there are some areas of the program that need improvement to suit all teachers, however, comes from the very small percentage of teachers who considered the program ineffective.

FINDINGS

INDUCTION PROGRAM PROVISION: There is an official induction process for the newly employed teachers in most schools (81.25%), but 18.75% of the schools lack such programs, indicating gaps in the system.

TEACHER ORIENTATION PARTICIPATION: While most teachers participate in orientation sessions (75%), 25% of the teachers have never been to any session, revealing possible barrier access of interest

SUPPORT AND MENTORSHIP: The induction process for the majority of schools involves support in the classroom (75%) and mentorship (68.75%), yet a mere 43.75% of the teachers have access to both sources of support, leading to an assumption that such incorporation could be maximized.

PROFESSIONAL DEVELOPMENT WORKSHOPS: Most teachers (62.5%) participate in

professional development workshops, with a significant portion participating quarterly or monthly. However, 12.5% had never participated in these workshops, which may suggest lack of access or awareness in some schools.

CLASSROOM PERFORMANCE IMPROVEMENT: Majority of teachers reported an improvement in classroom management skills (75%) and lesson planning and instructional delivery (87.5%) following the induction program.

FEEDBACK AND SUPERVISION: The majority of the teachers (62.5%) get regular feedback, but an alarming 12.5% don't get any feedback at all, which may be inhibiting their development and teaching skills.

BARRIERS TO EFFECTIVE INDUCTION: The most common barriers identified are lack of time (37.5%) and lack of resources (31.25%), which are undermining the effectiveness of the induction process.

SATISFACTION OF TEACHERS: A majority of 75% of the teachers reported being satisfied with induction support provided to them. Dissatisfaction is reported by some teachers (6.25%), highlighting improvement areas.

GENERAL EFFECTIVENESS OF THE PROGRAM: The majority of the teachers found the induction program is effective or highly effective (87.5%), implying that overall, the program positively affects teacher performance and improvement.

CONCLUSIONS

Positive Impact: The induction programs with a structured format have overall positive effects on teachers' classroom management, lesson planning, and instructional delivery. The program is seen to be effective in improving teacher effectiveness, especially in classroom organization and instructional delivery.

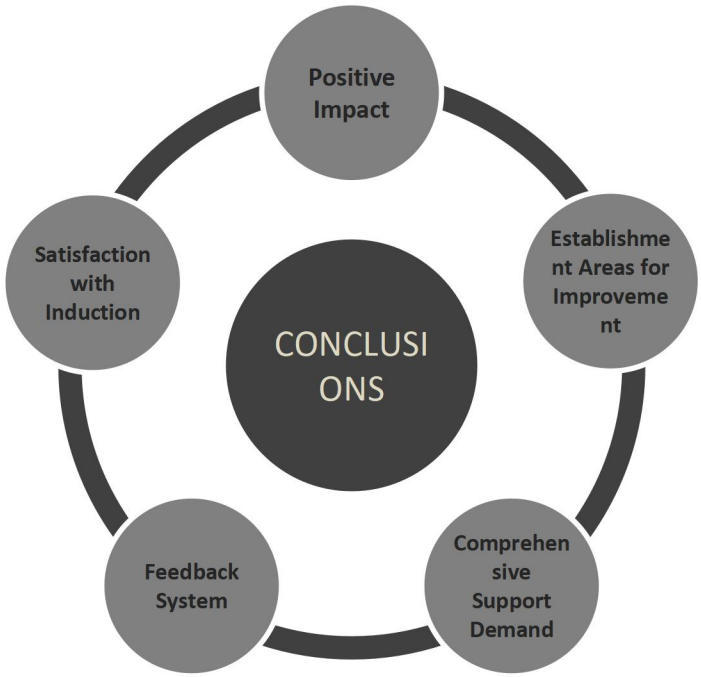
ESTABLISHMENT AREAS FOR IMPROVEMENT: In spite of the positive results, there are areas where induction programs lag behind in their implementation, particularly in the area of access and the delivery of full support. Disabling factors like time constraints and resources need to be overhauled so the programs can function more efficiently.

COMPREHENSIVE SUPPORT DEMAND: Although both classroom support and mentorship are offered, the integration and frequency of these support types need to be enhanced. Increased individualized mentorship would further improve the induction process of the teachers as a whole.

FEEDBACK SYSTEM: Constructive and frequent feedback is essential for the professional development of new teachers. Most of the teachers reported infrequent or no feedback, indicating that feedback systems need to be standardized and implemented.

SATISFACTION WITH INDUCTION: The majority of teachers were satisfied with the induction program but with further scope for improvement in making it even more

personalized to address specific needs of individual teachers, particularly those unhappy with the existing structure.



SUGGESTIONS AND POLICY RECOMMENDATIONS

On the basis of findings and conclusions drawn, the following suggestions are made to make the induction program for newly appointed teachers more effective:

INCREASE ACCESSIBILITY AND PARTICIPATION: In order to guarantee that all the newly appointed teachers are engaged in induction programs, schools can make an effort to raise the frequency and accessibility of orientation sessions, particularly for those who have never attended any. This might include flexible or online session arrangements to fit teachers' timetables.

IMPROVE MENTORSHIP AND CLASSROOM GUIDANCE: Schools ought to enhance the use of mentorship and classroom guidance so that both forms of support reach all newly hired teachers. Creating groups of experienced teachers with newcomers in a more structured mentorship program may strengthen this effort.

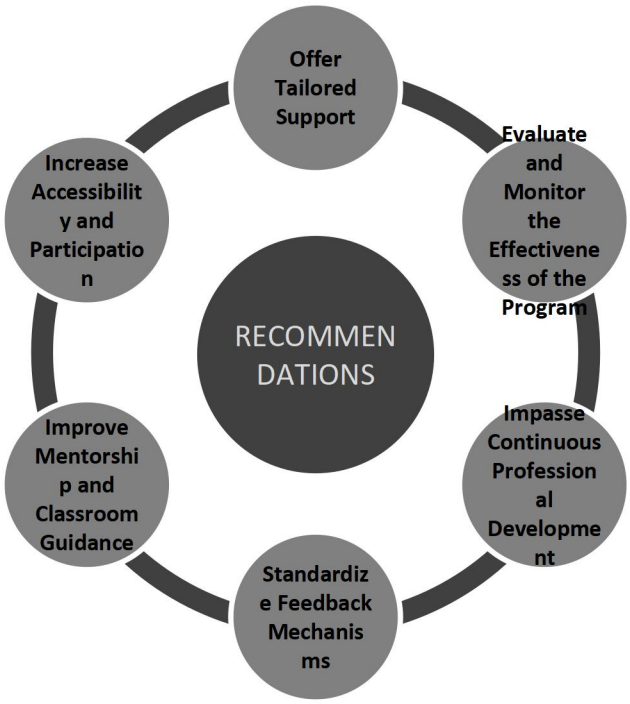
STANDARDIZE FEEDBACK MECHANISMS: A standardized system of feedback needs to be followed across schools, so that regular, constructive, and actionable feedback is provided to all newly recruited teachers on their job performance. Regular classroom observation, peer

review, and feedback from supervisors and mentors can be used for this purpose.

IMPASSE CONTINUOUS PROFESSIONAL DEVELOPMENT: While numerous teachers go to workshops, the frequency and the nature of the workshop should be aligned to address teachers' changing needs. Providing more practical and subject matter training could be effective in enhancing their teaching methods and improving student achievement.

EVALUATE AND MONITOR THE EFFECTIVENESS OF THE PROGRAM: The induction program should be regularly evaluated to ensure its effectiveness and make improvements based on teachers' feedback. Evaluation can be done by carrying out surveys, focus group discussions, and performance monitoring.

OFFER TAILORED SUPPORT: Certain teachers do have certain specific needs that aren't being filled by the standard program. There should be serious consideration of implementing more tailored assistance for teachers having difficulty with the standard induction approach. This would involve further mentoring, one-on-one coaching, or special training workshops for those teachers who deal with special concerns.



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